
NO_x RECLAIM WORKING GROUP MEETING

APRIL 15, 2021

JOIN ZOOM MEETING

[HTTPS://SCAQMD.ZOOM.US/J/98495022679](https://scaqmd.zoom.us/j/98495022679)

MEETING ID: 984 9502 2679

ASSN: 984 9502 2679

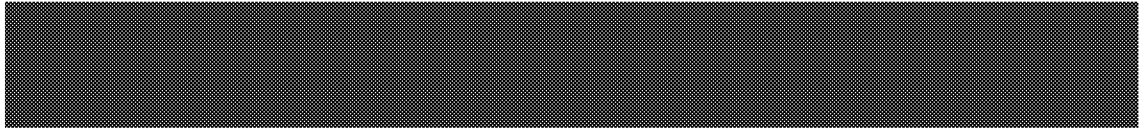
TELECONFERENCE DIAL-IN: 1-669-900-6833

Agenda

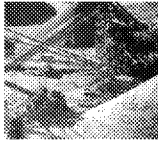
- Rulemaking Status on Landing Rules
- Bridge BARCT Requirements for Landing Rules
- Ongoing Efforts and Next Steps



RULEMAKING STATUS ON LANDING RULES

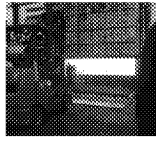


Rules Under Development



**PR 1147.1 – Aggregate
Facilities**

Public Hearing: August 6, 2021



**PR 1147.2 – Metal Melting
and Heating Furnaces**

Public Hearing: October 1, 2021



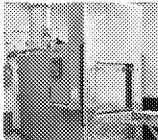
**PR 1109.1 – Refinery
Equipment**

Public Hearing: September 3, 2021



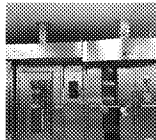
**PR 1159.1 – Nitric Acid
Processing Tanks**

Public Hearing: November 5, 2021



**PAR 1147 – Miscellaneous
Combustion Sources**

Public Hearing: December 3, 2021

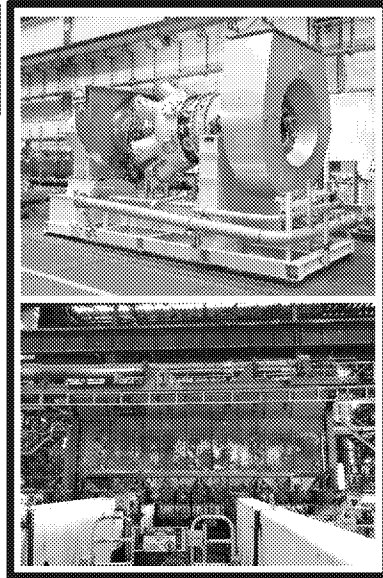


**PAR 1153.1 – Commercial
Food Ovens**

Public Hearing: December 3, 2021

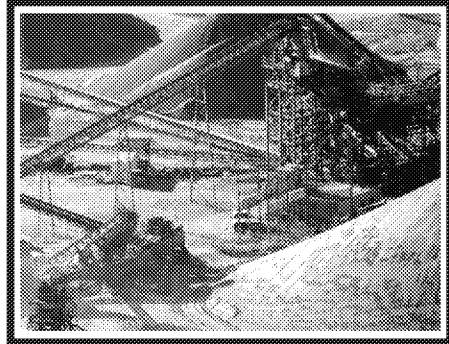
PAR 1147 – Miscellaneous Combustion Sources

- Previous Working Group Meeting held March 10, 2021
- Working with equipment vendors and burner manufacturers
- Cost-effectiveness analysis for remaining equipment categories anticipated to be presented at the next Working Group Meeting
- Next Working Group Meeting: May 2021
- Public Hearing: December 3, 2021



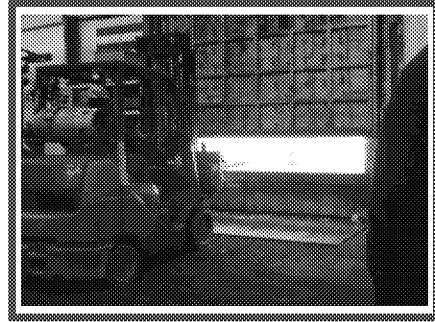
PR 1147.1 – Aggregate Facilities

- Working Group Meeting held on March 11, 2021
- Aggregate drying equipment will remain in PR 1147.1 instead of incorporating into PAR 1147
- Rule language overview to be presented during next Working Group Meeting
- Next Working Group Meeting: Early May 2021
- Public Hearing: August 6, 2021



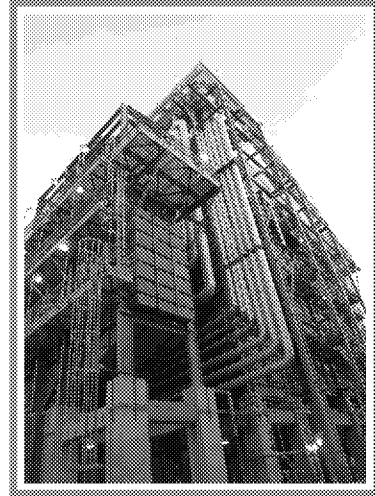
PR 1147.2 – Metal Melting and Heating Furnaces

- Working Group Meeting held on February 2, 2021
- Meeting with facilities to obtain more information
- Next Working Group Meeting: Late April 2021
- Public Hearing: October 1, 2021



PR 1109.1 – Refinery Equipment

- ※ Next Working Group Meeting: Late April
- ※ Revised cost data from facilities submitted
- ※ Staff currently reassessing BARCT and cost-effectiveness for:
 - ※ Heaters and boilers (>40 MMBtu/hr)
 - ※ FCCU with existing SCR_s
 - ※ Vapor incinerators and thermal oxidizers
- ※ Ongoing meetings to address issues and concerns from stakeholders
- ※ Start-up and shutdown provisions will be addressed in separate rule (PR 429.1)
- ※ Public Hearing moved to September 3, 2021



PR 1159.1 – Nitric Acid Processing Tanks

- Addresses NO_x emissions from nitric acid processing tanks
- Staff in data gathering phase
- Public Hearing: November 5, 2021



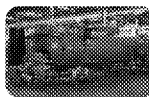






<https://www.nrc.gov/links/pubs/links.cfm?id=6744>

PAR 1153.1 – Commercial Food Ovens

- Staff identified 6 RECLAIM facilities which operate food ovens, smokers, or dryers that will be subject Rule 1153.1
- Staff in data gathering phase
- Food ovens at RECLAIM facilities will become subject to the requirements of Rule 1153.1
- Public Hearing: December 3, 2021



Emission Reductions (Tons per Day*)

	Rules 1146, 1146.1, 1146.2 – Boilers, Process Heaters, and Steam Generators	0.27		Rule 1135 – Electricity Generating Facilities	1.7
	Rule 1118.1 – Non Refinery Flares	0		Rule 1110.2 – Gaseous- and Liquid-Fueled Engines	0.29
	Rules 218, 218.2, 218.3 – Continuous Emissions Monitoring Systems	0		Rule 1117 – Container Glass Melting/Sodium Silicate Furnaces	0.57
	Rule 1134 – Gas Turbines	1.8			

Total NOx Reductions = 4.63 tons per day*

* Sum of NOx reductions from RECLAIM facilities only. Some NOx reductions may be attributed to the 2015 RECLAIM shave.

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BARCT REQUIREMENTS FOR LANDING RULES



BARCT Requirements – Background

- ※ U.S. EPA has commented as facilities transition out of RECLAIM there needs to be a an interim BARCT requirement until implementation of BARCT requirements in applicable landing rules
- ※ BARCT implementation dates vary in landing rules
 - ※ Implementation dates for some equipment will extend beyond the date facilities are expected to transition out of RECLAIM
- ※ Clean Air Act Section 110(l) prohibits the U.S. EPA from approving a revision to a SIP if the revision would interfere with any applicable requirement concerning attainment
 - ※ RECLAIM currently establishes BARCT in aggregate

Current RECLAIM Timeline

- ⌘ Based on input from U.S. EPA, RECLAIM facilities cannot be transitioned out of RECLAIM until U.S. EPA approves Regulation XIII, Regulation XX, and landing rules
 - ⌘ Facilities are not expected to be able to exit RECLAIM before January 1, 2023, and more likely around January 1, 2024
 - ⌘ Several landing rules and proposed landing rules contain implementation dates beyond January 1, 2024
- ⌘ RECLAIM facilities need to be transitioned simultaneously since RECLAIM was approved into the SIP as one entire program
 - ⌘ Removing a portion of facilities would require RECLAIM to be approved back into the SIP which will be challenging with the current Economic Incentive Program (EIP) guidance

Implementation Schedules for Adopted/Amended Landfill		
Rule Number(s)	Equipment Category	
	BARCT Limit Applicable On or Before January 1, 2024	BARCT Limit Applicable After January 1, 2024
Rule 1110.2 – Gaseous- and Liquid-Fueled Engines	<ul style="list-style-type: none"> Stationary engines 	<ul style="list-style-type: none"> Compressor gas lean-burn engines
Rule 1117 – Container Glass Melting/Sodium Silicate Furnaces	<ul style="list-style-type: none"> Container glass melting furnace Sodium silicate furnace 	<ul style="list-style-type: none"> Auxiliary combustion equipment used in the manufacture of container glass
Rule 1118.1 – Non Refinery Flares	<ul style="list-style-type: none"> Flares with submitted application to install, replace, or relocate after January 4, 2019 	N/A
Rule 1134 – Gas Turbines	<ul style="list-style-type: none"> Stationary gas turbines, excluding compressor gas turbines 	<ul style="list-style-type: none"> Compressor gas turbines
Rule 1135 – Electricity Generating Facilities	<ul style="list-style-type: none"> Boilers Gas turbines 	<ul style="list-style-type: none"> Diesel internal combustion engines located on Santa Catalina Island
Rules 1146, 1146.1, 1146.2 – Boilers, Process Heaters, and Steam Generators	<ul style="list-style-type: none"> Rules 1146 and 1146.1 units 	<ul style="list-style-type: none"> Rule 1146.2 Type 1 units need BARCT assessment Rule 1146.2 Type 2 units if BARCT assessment determines more stringent limits are necessary

I'm concerned that this is too much detail
I agree. Also, I would not characterize 1146.2 quite like that.

Bridge Requirements in Landing Rules

- Staff identified two approaches to bridge BARCT requirements post RECLAIM, until BARCT requirements in landing rules are implemented
- Staff is proposing two approaches for discussion and is seeking input from stakeholders

Limit Annual Emissions to 14.5 tons per day (tpd) of NO_x for All RECLAIM Facilities

Interim NO_x BARCT Limits for Equipment with Compliance Dates after January 1, 2024

Limit Annual Emissions to 14.5 tons per day (tpd) of NOx for All RECLAIM Facilities

- Conduct annual analysis to ensure annual emissions for RECLAIM facilities is at or below 14.5 tpd of NOx
- If annual NOx emissions exceed 14.5 tpd, staff will conduct an assessment on future effective compliance dates and estimated emission reductions
- Taking into account future effective compliance dates, If projected emissions are expected to exceed the 14.5 tpd for 18 months or longer:
 - Staff will initiate rulemaking to establish interim BARCT limits for the units with the longest implementation time period

Interim NOx BARCT Limits for Equipment with Compliance Dates after January 1, 2024

- ❖ Develop interim NOx BARCT limits for equipment with compliance dates after January 1, 2024
- ❖ Staff expects that U.S. EPA approval of the three regulatory elements (Regulation XIII, Regulation XX, and landing rules) is likely post January 1, 2024,
- ❖ Staff will need to revisit adopted and amended landing rules to establish interim NOx BARCT limits that would be effective after facilities transition out of RECLAIM and until implementation of NOx BARCT limits in landing rules
- ❖ Interim BARCT limit would be representative of current NOx levels and is not intended to require interim reductions

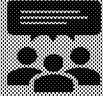
Ongoing Efforts and Next Steps



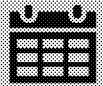
Continue rulemaking activities



Continue working with U.S. EPA, CARB, and stakeholders



Monthly RECLAIM and Regulation XIII NSR Working Group Meetings



Quarterly Stationary Source Committee updates

Contacts

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To receive e-mail notifications for Regulation XX or Regulation XIII, sign up at: www.aqmd.gov/sign-up
To view proposed rules and supporting documentation, visit the South Coast AQMD Proposed Rules webpage at:
<http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules>

Rule Contacts – Proposed Amended/Adopted

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Proposed Amended Rule 1153.1	Gary Quinn, P.E.	Program Supervisor	909-396-3121	gquinn@aqmd.gov
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Rule Contacts – Amended/Adopted

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